#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit 3625

In re application of Davis et al

Confirmation No. 5321

Application No.: 09/502,542

Filed: February 10, 2000

For: METHOD AND SYSTEM FOR

FACILITATING ON-LINE SHOPPING

VIA ELECTRONIC FILING

Examiner: M. Fadok Date: May 15, 2006

# SECOND APPEAL BRIEF

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Sir:

This brief is in furtherance of the Notice of Appeal filed March 9, 2006, and the Notice of Panel Decision from Pre-Appeal Brief Review mailed April 14, 2006. Please charge the fee required under 37 CFR 1.17(f) or any deficiency to deposit account 50-1071 (see transmittal letter).

An earlier appeal, filed in 2004, resulted in re-opening of prosecution.

I.	REAL PARTY IN INTEREST	3
II.	RELATED APPEALS AND INTERFERENCES	3
III.	STATUS OF CLAIMS	3
IV.	STATUS OF AMENDMENTS	3
V.	SUMMARY OF CLAIMED SUBJECT MATTER	3
VI.	GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	7
VII.	ARGUMENT	7
1.	Claim 1 (102: Swartz)	7
2.	Claim 10 (102: Swartz)	9
3.	Claim 24 (102: Swartz)	9
4.	Claim 25 (102: Swartz)	9
5.	Claim 20 (102: Swartz)	10
6.	Claim 21 (102: Swartz)	11
7.	Claim 22 (102: Swartz)	11
8.	Claim 23 (102: Swartz)	12
9.		
10	D. Claim 11 (§ 103: Swartz, Official Notice)	13
1	Claim 3 (§ 103: Swartz, Official Notice)	13
13		
1:		
14		
1:		
10		
1		
18		
15		
20		
2		
2:		
2:		
2		
2:		23
VIII	CONCLUSION	23
IX.	PENDING CLAIMS APPENDIX	
X.	EVIDENCE APPENDIX	28
XÏ.	RELATED PROCEEDINGS APPENDIX	29

### I. REAL PARTY IN INTEREST

The real party in interest is Digimarc Corporation, by an assignment from the inventors recorded at Reel 10883, Frames 453-455, on May 23, 2000.

#### II. RELATED APPEALS AND INTERFERENCES

There is no related appeal or interference.

#### III. STATUS OF CLAIMS

Claims 1, 3-7 and 9-27 stand finally rejected and are appealed. (Claims 2 and 8 were canceled during prosecution.)

#### IV. STATUS OF AMENDMENTS

All earlier-filed amendments have been entered.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellants' invention relates to various improvements that facilitate shopping.

On-line shopping is popular with certain technically adventurous segments of the public, but drawbacks have prevented more widespread adoption.<sup>2</sup>

Consider on-line grocery stores. These virtual storefronts offer an impressive inventory of choices, but have cumbersome user interfaces for product selection.<sup>3</sup>

Some on-line grocery stores have products arranged by category (e.g., fresh vegetables, canned vegetables, soft drinks, etc.) Each category has further sub-categories. By repeated mouse-clicking through a graphical user interface, the user can hope to drill down through

See, e.g., Specification, page 1, lines 8-9.

different categories and sub-categories (and sub-sub-categories, etc.) to finally identify a desired product.

An alternative approach is a "Search" option, providing a box into which the shopper can type in the name of a desired product, e.g., Jif peanut butter. After entering this data, the user may be presented with a menu of several products that meet the search criteria (e.g., Jif Chunky, Jif Smooth – each in 4 oz., 8 oz., and 16 oz. sizes).

These cumbersome selection techniques must be repeated for each desired item.

The net experience is tedious and time consuming; many first-time users give up in despair.<sup>5</sup>

The situation is improved for shoppers who stick with the process and successfully complete one or more on-line orders. Items previously purchased by such users are detailed in a list (a "favorites list") that is presented when the user next signs-on to the store, and can be reordered without the tedious navigation-selection processes just-detailed.<sup>6</sup>

In accordance with one aspect of the present invention, the initial user-interface hurdle to a satisfying shopping experience is overcome by permitting the user to compile a favorites list through shopping at one or more <u>bricks-and-mortar</u> stores.<sup>7</sup>

Walking the aisles of such a physical store, the user quickly scans each item that may be of future interest. Each successful "read" of a product indicia (e.g., bar code, RFID) is confirmed with an audio tone or a visible indication. A corresponding product ID (e.g., an SKU, or bar code identifier) is added to a list maintained for that user. After wandering the aisles for ten or 15 minutes, the user has compiled a list of items. This list can later be used to create a virtual on-line store customized for that user. §

Rather than scanning items in the aisles, the user may alternatively purchase items at the physical grocery's checkout. Again, the items are scanned, identified, and added to a favorites list associated with that user.<sup>9</sup>

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See, e.g., Specification, page 1, lines 10-11.
See, e.g., Specification, page 1, lines 11-16.
See, e.g., Specification, page 1, lines 18-19.
See, e.g., Specification, page 1, lines 19-23.
See, e.g., Specification, page 1, lines 24-26.
See, e.g., Specification, page 3, lines 11-18.
See, e.g., Specification, page 1, lines 27-28; page 3, lines 5-10; Fig. 2.
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In both cases, when the user later shops on-line, a personalized on-line shopping environment is presented, featuring the items *previously identified* in the bricks and mortar store(s). 10

More particularly, this aspect of the invention includes the following acts: 11

- presenting a collection of retail items each having an indicia associated therewith - in a bricks and mortar store offering items for sale;
- · sensing the indicia associated with selected ones of said items;
- · compiling a list identifying the items whose indicia were sensed;
- storing said list in a data structure associated with a user;
- · later recalling said list;
- using said recalled list to present a customized selection of items in an on-line shopping environment; and
- receiving input from a user identifying a subset of items from said customized selection of items

Optionally, the user can identify desired items in one vendor's <u>bricks and mortar</u> store (e.g., Albertson's), and can later employ the listing thereby compiled when shopping in a different vendor's (e.g., Safeway's) <u>on-line</u> shopping environment.<sup>12</sup>

By the foregoing arrangements, the familiar exercise of visiting a bricks and mortar store is used to facilitate a subsequent on-line shopping experience.

Through use of a list of products associated with a user (e.g., compiled in a physical store

- as detailed above, or obtained otherwise), a variety of other enhancements can be made to an
on-line shopping experience. For example, if a user enters an on-line order without any dessert or
cookie item, a system according to another aspect of the present invention can present a query
listing dessert/cookie items from that user's favorite list - as the order is being finalized - in case
the omission was an oversight.<sup>13</sup>

Such suggestion of additional items may be triggered only if the purchase meets one or

See, e.g., Specification, page 1, lines 28-30; claim 1.

Claim 1 (as originally filed, and as pending).

See, e.g., Specification, page 6, lines 8-15.

See, e.g., Specification, page 5, lines 9-13.

more criteria. The criteria can include total purchase size (e.g., over \$75), time since last order (e.g., no cookies ordered for 30+ days), etc. 14

An on-line system can also track the user's purchase habits. If the user customarily orders 3 half gallons of skim milk every week, and a weekly order is entered without such an item, the system can query whether such item should be included before finalizing the order.<sup>15</sup>

In accordance with still another aspect of the present invention, an on-line shopping environment is improved by displaying a virtual shopping aisle, with graphical representations of items for sale - instead of simply textual listings. Thus, a box of Ritz crackers may be represented in a virtual aisle with a depiction of the familiar red box, or by the familiar logo, or both. In such arrangements, items of potential interest to a particular shopper (e.g., items that were identified by reference to that shopper's prior activity in a bricks and mortar store) are presented more prominently in the graphical display (e.g., larger, more brightly, etc.) – thereby facilitating shopping. <sup>16</sup>

In a variant of such graphical shopping environment arrangement, the item presented more prominently in the display is one that the shopper has not previously purchased from the on-line vendor.<sup>17</sup> In another variant, the item presented more prominently is identified by reference to the shopper's prior history – including transactions with vendors other than the on-line vendor.<sup>18</sup> In still another variant, the item presented more prominently is identified by sensing identification data from products while at the shopper's residence.<sup>19</sup>

While the foregoing arrangements generally take information collected in a bricks and mortar environment, and apply it to facilitate later shopping in an on-line environment, the opposite is also contemplated. That is, information collected during on-line shopping sessions (e.g., product preferences, shopping habits) can be used thereafter in a bricks and mortar facility to enhance the shopper's experience there.<sup>20</sup>

See, e.g., Specification, page 5, lines 14-16.
See, e.g., Specification, page 5, lines 18-20.
See, e.g., Specification, page 7, lines 10-16.

See, e.g., Specification, page 7, lines 10-16.
See, e.g., Specification, page 3, lines 5-11.

See, e.g., Specification, page 2, lines 29-30.
See, e.g., Specification, page 7, lines 5-9.

See, e.g., Specification, page 7, lines 5-9.
See, e.g., Specification, page 8, lines 8-13.

APPEAL BRIEF 09/502.542

A variety of other novel arrangements are also presented, as more particularly detailed below.

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 7, 10 and 20-25 stand rejected under § 102(e) over Swartz (6,243,447).

Claims 3-6, and 11-14 stand rejected under § 103 over Swartz in view of Official Notice.

Claims 26 and 27 stand rejected under § 103 over Swartz in view of St. Regis Paper Co. v. Bemis Co., 193 USPO 8.

Claims 9, 15-17 and 19 stand rejected under  $\S$  103 over Kenney (6,381,583) in view of Swartz.

Claim 18 stands rejected over Kenney in view of Swartz and further in view of St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

## VII. ARGUMENT

## Claim 1 (102: Swartz)<sup>21</sup>

Claim 1 is said to be anticipated by Swartz (6.243,447). The claim reads as follows:

#### 1. A method comprising:

presenting a collection of retail items, each having an indicia associated therewith, in a bricks and mortar store offering items for sale;

sensing the indicia associated with selected ones of said items; compiling a list identifying the items whose indicia were sensed; storing said list in a data structure associated with a user; and later recalling said list:

using said recalled list to present a customized selection of items in an on-line shopping environment; and

receiving input from a user identifying a subset of items from said customized selection of items.

The anticipation rejection fails, e.g., because Swartz does not teach the last two clauses.

Swartz discloses a self-checkout system for a retail store, in which a shopper equipped with a personal barcode scanner scans items put into their grocery cart, thereby generating a list. At the checkout register, a cashier retrieves the scanned list and charges the shopper accordingly.<sup>22</sup>

Swartz's scanner can also be used to compile a predicted shopping list (based on a shopper's historical shopping practices), which may be retrieved by the shopper for later use at the store <sup>23</sup>

In claim 1, as in other claims, appellants have emphasized the interrelationship between activities (1) in a bricks and mortar store, and (2) in an online shopping environment. Swartz concerns just a bricks and mortar store. He does not teach any online shopping environment.

Contrary to the Final Action, <sup>24</sup> col. 8, lines 7-53 of Swartz does not teach "using said recalled list ... in an on-line shopping environment." Rather, this passage teaches the former action - compiling a list of items while shopping in a retail (i.e., bricks and mortar) store.

Likewise contrary to the Action, Swartz col. 3, lines 18-39<sup>25</sup> does not teach "receiving input from a user identifying a subset of items from said customized selection of items [presented in the on-line shopping environment]." Rather, Swartz again teaches creation of a list while shopping in a retail store, and the use of such a list as a "predicted shopping list" during subsequent bricks and mortar shopping.

Because Swartz does not teach an arrangement in which a list is compiled in a bricks and mortar store by sensing indicia from selected items, and such list is thereafter used in presenting a customized selection of items in an on-line shopping environment, the anticipation rejection of claim 1 based on Swartz fails.

See, e.g., December 5, 2005, Final Rejection, page 3.

<sup>22</sup> Swartz, US 6,243,447, col. 3, lines 43-64.

<sup>23</sup> Swartz, US 6,243,447, col. 3, lines 35-39.

December 5, 2005, Final Rejection, page 3.

<sup>25</sup> Ibid

#### 2. Claim 10 (102: Swartz)

The anticipation rejection (Swartz) of claim 10 stands or falls with the anticipation rejection (Swartz) of claim 1, from which it depends.

#### 3. Claim 24 (102: Swartz)

The anticipation rejection (Swartz) of claim 24 stands or falls with the anticipation rejection (Swartz) of claim 1, from which it depends.

### 4. Claim 25 (102: Swartz)<sup>26</sup>

Claim 25 depends from claim 1 and is similarly allowable. Moreover, claim 25 is independently patentable. The claim reads:

25. The method of claim 1 wherein the sensing of at least one item occurs without an associated purchase transaction.

The Final Rejection states that Swartz teaches such arrangement at col. 3, lines 17-38.<sup>27</sup>
Not so.

The cited passage reads as follows:

This invention relates to a new self-checkout system for a retail shopping environment. The system is comprised of a plurality of portable communications terminals, a store's host computer, and a plurality of store checkout stations. Each portable communications terminal is owned or leased by the consumer using it, or made available to the consumer by the telephone network service provider. Unlike the self-checkout systems described above, the use of the new self-checkout system allows the consumers to take the device with them when they leave a store. Because a consumer can take the terminal home, he may use it for personal transactions to be described herein. The portable communications terminal has a bar code reading module and a telephone module. It may be used as cellular telephone, a modem, or as a personal hand-held scanning terminal.

APPEAL BRIEF 09/502.542

See, e.g., December 5, 2005, Final Rejection, page 5.

December 5, 2005, Final Rejection, page 5.

When using the device as a personal hand-held scanning terminal, the consumers may scan coupons or other bar coded materials and thereby make their own shopping lists. Also, a terminal resident software program may create a "predicted shopping list" based upon the customer's historical shopping profile and scanned item lists. A consumer may later retrieve these lists and use them during shopping.

Because Swartz does not teach an arrangement in which a list is compiled in a bricks and mortar store by sensing – without purchasing – an item (and such list is thereafter used in presenting a customized selection of items in an on-line shopping environment), the anticipation rejection of claim 25 fails.

### 5. Claim 20 (102: Swartz)<sup>28</sup>

Claim 20 is an independent claim that reads as follows:

20. A method of facilitating on-line shopping comprising: collecting data about products of interest during a shopper's visit to a bricks and mortar store, said data being collected prior to check-out; and using the data thereby acquired in a later on-line shopping session with said shopper.

The Final Rejection dismisses this claim by the reference "see response to claim 1."29

Again, the passages cited from Swartz in connection with claim 1 do not teach the claimed relationship between activities in a bricks and mortar store, and subsequent activities in an online shopping environment.

Because Swartz does not teach collecting data about products of interest during a visit to a <u>bricks and mortar store</u>, and later using such data in an <u>on-line shopping session</u>, the rejection of claim 20 fails

December 5, 2005, Final Rejection, page 4.

See, e.g., December 5, 2005, Final Rejection, page 4.

### 6. Claim 21 (102: Swartz)<sup>30</sup>

Claim 21 depends from claim 20 and is similarly allowable. Moreover, claim 21 is independently patentable. The claim reads:

21. The method of claim 20 wherein at least certain of the products of potential interest are not purchased by said shopper during said visit to said store.

The Final Rejection dismisses this claim by the statement "see response to claim 1."

However, claim 1 did not include the limitation presented in claim 21.

Swartz does not teach any arrangement in which an arrangement in which a list is compiled in a bricks and mortar store by sensing – without purchasing – an item (and such list is thereafter used in presenting a customized selection of items in an on-line shopping environment). Accordingly, the rejection of claim 21 fails.

# 7. Claim 22 (102: Swartz)<sup>31</sup>

Claim 22 depends from claim 20 and is similarly allowable. Moreover, claim 22 is independently patentable. The claim reads:

22. The method of claim 20 wherein the data collection includes shopper activation of a shelf-based sensor associated with a product of interest.

The Final Rejection rejects this claim by reference to the rejection of claim 11. <sup>32</sup> Claim 11, however, concerns a different limitation, *i.e.*, "the sensing comprises sensing an RFID identifier." And claim 11 was not rejected under § 102, but § 103 – with the Office conceding that Swartz does not teach an RFID device.<sup>33</sup>

Thus, if claim 22 is construed to encompass an RFID device, the Office has conceded that Swartz does not anticipate same.

See, e.g., December 5, 2005, Final Rejection, page 4.

See, e.g., December 5, 2005, Final Rejection, page 4.

December 5, 2005, Final Rejection, page 4.
December 5, 2005, Final Rejection, page 5.

APPEAL BRIEF 09/502.542

Moreover, regarding spec support for the "activation of a shelf-based sensor associated with a product of interest" limitation of claim 22, appellants' specification describes:

In other embodiments, the selection device needn't be an active device. Instead, for example, the user can have a passive barcode-encoded card that is presented to a shelf-mounted reader associated with each item. These readers are linked to the central computer, and relay the identities of users who identify themselves as interested in the corresponding product.<sup>34</sup>

Swartz does not teach any such arrangement, wherein the shopper activates a shelf-based sensor associated with a product of interest.

Again, the § 102 rejection fails.

#### 8. Claim 23 (102: Swartz)

The anticipation rejection (Swartz) of claim 23 stands or falls with the anticipation rejection (Swartz) of claim 20, from which it depends.

#### 9. Claim 7 (102: Swartz)35

Claims 7 also stands rejected as anticipated by Swartz. The claim reads as follows:

#### 7. A method comprising:

logging a shopper's habits or preferences exhibited in an on-line shopping environment in one or more database records associated with that shopper; and recalling said logged database record in a bricks and mortar store and using the logged information in connection with bricks and mortar shopping by said user.

Claim 7 is somewhat the mirror image of claim 20. Roughly speaking, claim 7 involves database-logging of a shopper's habits or preferences in an <u>on-line</u> shopping environment, and using the database information in connection with <u>bricks and mortar</u> shopping by the user.<sup>36</sup>

Specification, page 8, lines 8-13; original claim 7.

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Specification, paragraph bridging pp. 3-4.

See, e.g., December 5, 2005, Final Rejection, page 9.

The Final Rejection contends that the last claim clause is met by Swartz's teaching at col.

11, lines 20-25.<sup>37</sup> Not so. This passage of Swartz contains <u>no</u> teaching of habits logged in an <u>online</u> shopping environment being recalled and used in connection with <u>bricks and mortar</u> shopping. The cited passage from Swartz reads:

...the customer's payment and records it into the store computer via link3. As shown by the process block 181, the store computer receives the payment information and saves the customer's checkout file into the customer's historical profile record. This historical profile record will be used in conjunction with other data to generate future security [measures during customer's future self-checkout transactions]

Because Swartz fails to teach that habits logged in an on-line shopping environment are recalled in used in bricks and mortar shopping, the anticipation rejection of claim 7 fails.

#### 10. Claim 11 (§ 103: Swartz, Official Notice)

The rejection of claim 11 stands or falls with the anticipation rejection of claim 1, from which it depends.

# 11. Claim 3 (§ 103: Swartz, Official Notice)38

Claim 3 is an independent claim that reads as follows:

identifying a user by reference to a login identifier;
recalling a list of products associated with the user;
presenting products from said list to the user for selection;
receiving user selections of products to be purchased;
receiving an indication that the user is finished selecting products; and
thereafter querying the user regarding possible purchase of an item not selected
by the user but on said recalled list, before completing the online shopping session.

3. A method of conducting an online shopping session comprising:

December 5, 2005, Final Rejection, page 10.

See, e.g., December 5, 2005, Final Rejection, page 6.

Claim 3 is drawn to "a method of conducting an *online* shopping session." Contrary to the Final Action, <sup>39</sup> Swartz does not concern an online shopping session. Rather, his disclosure concerns retail shopping environments, with physical aisles and physical checkout registers, etc. This is the opposite of the online shopping arrangement required by the claim language. (Note that the "online" limitation is found not just in the claim preamble, but also in the body of the claim – in the last clause.)

Moreover, claim 3 requires, "querying the user regarding possible purchase of an item not selected by the user but on said recalled list, before completing the online shopping session." The Final Action acknowledges that Swartz has no disclosure on this point.

The Office relies on Official Notice to cure the omission. However, such usage is contrary to MPEP guidance concerning the proper use of Official Notice.

MPEP 2144.03 explains that facts of which such *Notice* may be taken should serve to "fill in the gaps" which might otherwise exist in an evidentiary showing. Such expedient "should not comprise the principle evidence upon which a rejection is based."

In the present case, Official Notice is applied as the <u>principle evidence</u> on which the rejection is based – at the very point of novelty of the claim. This is error.

In response to appellants' request, 40 the Office cited Ogasawara (6,123,259) in the Final Rejection as exemplary of Official Notice art, allegedly curing Swartz's shortcomings. 41 However, like Swartz, Ogasawara concerns shopping in a bricks and mortar store. Ogasawara does not teach the claim limitation of "querying the user ... before completing the online shopping session.")

Still further, the rejection of claim 3 impermissibly uses appellants' claim as a guide in modifying and combining the references. No teaching or suggestion drawn from the art is offered as leading an artisan to the claimed arrangement.

<sup>39</sup> December 5, 2005, Final Rejection, page 6.

October 14, 2005, Response After Final, page 2.

<sup>41</sup> December 5, 2005, Final Rejection, page 13.

Thus, the rejection of claim 3 is multiply-flawed. The principle reference does not teach that for which it is cited. Official Notice is incorrectly applied. And the combination draws from hindsight, rather than a teaching/suggestion in the art. Thus, prima facie obviousness of claim 3 has not been established.

#### 12. Claim 4 (§ 103: Swartz, Official Notice)

The rejection of claim 4 stands or falls with the rejection of claim 3, from which it depends.

### 13. Claim 5 (§ 103: Swartz, Official Notice)42

Claim 5 depends from claim 3 and is similarly allowable. Moreover, claim 5 is patentable independently. The claim reads:

5. The method of claim 3 which includes selecting said item in accordance with a procedure that depends, in part, on the passage of a predetermined interval of time without the user selecting said item for purchase.

The Final Rejection did not particularly address the limitation introduced by this claim.<sup>43</sup>
No explanation was offered as to why an artisan would have been led to the claimed arrangement, *i.e.*, wherein the user is queried about an article selected based, in part on the passage of a predetermined interval of time.

Again, the Final Rejection failed to establish prima facie obviousness.

December 5, 2005, Final Rejection, page 8.

See, e.g., December 5, 2005, Final Rejection, pages 6, 8.

#### 14. Claim 6 (§ 103: Swartz, Official Notice)44

Claim 6 depends from claim 3 and is similarly allowable. Moreover, claim 6 is patentable independently. The claim reads:

6. The method of claim 3 that includes selecting said item only if the total price of items selected by the user meets a pre-determined criterion.

Again, the Final Rejection did not particularly address the limitation introduced by this claim.<sup>45</sup> Again, no explanation was offered as to why an artisan would have been led to the claimed arrangement, *i.e.*, wherein an article is selected for querying of the user only if the total price of items selected by the user meets a pre-determined criterion.

Again, the Final Rejection failed to establish prima facie obviousness.

#### 15. Claim 12 (§ 103: Swartz, Official Notice)46

Claim 12 depends from claim 3, and is similarly allowable. Moreover, claim 12 is patentable independently. The claim reads:

12. The method of claim 3 in which the item not selected by the user, but on said recalled list associated with the user, is a dessert or cookie item.

Again, no art has been cited in connection with this claim limitation. Lacking art, the Office offers a somewhat untraditional argument:

The examiner maintains that the list would be considered the set of items and the items upon the list the sub-set, therefore, understanding the opportunity for an infinite number of products in a store being placed on this list, the examiner has concluded that all items that could be present on a list are included as the sub-set to the total set of items being the list.<sup>47</sup>

Appellants respectfully submit that such argument does not substitute for the prima facie

See, e.g., December 5, 2005, Final Rejection, pages 6, 8

<sup>45</sup> December 5, 2005, Final Rejection, page 8.

See, e.g., December 5, 2005, Final Rejection, page 7.

showing required under § 103.

Because no art has been cited teaching the cited limitation, the claimed combination cannot result from the cited art. Moreover, the rejection lacks any rationale leading an artisan to modify the art to yield the claimed arrangement.

Again, the rejection is multiply-flawed, and the requisites of § 103 have not been established.

### 16. Claim 13 (§ 103: Swartz, Official Notice)48

Claim 13 depends from claim 3, and is similarly allowable. Moreover, claim 13 is patentable independently. The claim reads:

13. The method of claim 3 in which the item is the subject of said query only if said item has not been purchased by the user for a predetermined period.

The Final Rejection did not particularly address the limitation introduced by this claim.<sup>49</sup>
No explanation was offered as to why an artisan would have been led to the claimed arrangement, i.e., wherein the user is queried about an article selected based, in part on the passage of a predetermined interval of time.

Again, the Final Rejection failed to establish prima facie obviousness.

# 17. Claim 14 (§ 103: Swartz, Official Notice)50

Claim 14 depends from claim 3, and is similarly allowable. Moreover, claim 14 is patentable independently. The claim reads:

14. The method of claim 3 in which the item is the subject of said query only if the user has demonstrated a prior purchasing habit related to said item, and the omission of said item is not in accordance with said demonstrated habit.

December 5, 2005, Final Rejection, page 7, last paragraph.

See, e.g., December 5, 2005, Final Rejection, page 8.

December 5, 2005, Final Rejection, page 8.

See, e.g., December 5, 2005, Final Rejection, pages 6, 8.

Again, the Final Rejection did not particularly address the limitation introduced by this claim.<sup>51</sup> No explanation was offered as to why an artisan would have been led to the claimed arrangement, *i.e.*, wherein an item is the subject of a query only if the user has demonstrated a prior purchasing habit related to the item, and the omission of the item is not in accordance with the demonstrated habit.

Again, the Final Rejection failed to establish prima facie obviousness.

# 18. Claim 27 (§ 103: Swartz, Official Notice, St Regis Paper v. Bemis Co)52

Claim 27 depends from claim 3, and is similarly allowable. Moreover, claim 27 is patentable independently. The claim reads:

27. The method of claim 3 in which the on-line shopping session is with a first vendor, yet products included on the recalled list include products that the user has not purchased from the first vendor.

The Office tacitly concedes that Swartz does not teach this limitation. However, the claim is rejected by reference to a 1977 7th Circuit case, St. Regis Paper Co. v. Bemis Co., 193 USPO 8.

The Examiner's reliance on *St. Regis* is misplaced; that case dealt with duplicating elements in a system. That is not what is claimed. Rather, the claim requires recalling products that a user has not purchased from a vendor, when on-line shopping with such vendor.

(Moreover, the Examiner errs in reading a per se rule — that certain types of claims are always obvious — from the 7<sup>th</sup> Circuit's decision. The issue of obviousness must always be determined on a case by case basis.)

Again, prima facie obviousness has not been established.

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<sup>51</sup> December 5, 2005, Final Rejection, page 8.

See, e.g., December 5, 2005, Final Rejection, page 9.

## 19. Claim 26 (§ 103: Swartz, Official Notice, St Regis Paper v. Bemis Co)53

Claim 26 depends from claim 1, and is similarly allowable. Moreover, claim 26 is patentable independently. The claim reads:

26. The method of claim I in which the bricks and mortar store is associated with a first vendor, and the recalled list is used by a second wendor distinct from the first, to present a customized selection of items in an on-line shopping environment.

Again, this claim is rejected over Swartz in view of St. Regis.

As noted above, the 7th Circuit's holding in St Regis did not define a per se rule of obviousness. Moreover, St. Regis is inapposite in connection with claim 26.

Claim 26 does not concern mere duplication of parts known from the prior art (as was the case in St. Regis). Rather, claim 26 defines a method in which a list is compiled in a bricks and mortar store of a <u>first vendor</u>, and is then recalled/used in connection with on-line shopping with a second, different, vendor.

Again, the Office has failed to establish prima facie obviousness of the claim.

### 20. Claim 9 (8 103: Kenney + Swartz)54

Claim 9 is an independent claim that reads as follows:

9. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical – rather than strictly textual –representations of items for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest by reference to the shopper's prior activity in a bricks and mortar store.

The primary reference for this, and subsequent, rejections is Kenney. Kenney teaches a virtual shopping arrangement having a visual look like that of a physical store:

See, e.g., December 5, 2005, Final Rejection, page 6.
 See, e.g., December 5, 2005, Final Rejection, page 10.



The Final Rejection combines Kenney with Swartz – the bar code scanner system discussed above.

The rejection of claim 9 fails because Swartz again does not teach that for which it has been cited - "a method of on-line shopping." The Final Action states, "Swartz teaches scanning data on a device, which can later be used to purchase products on-line (see response to claim 1)."

Not so. As noted, Swartz does not teach purchasing products on-line.

Thus, the rejection is premised on an error of fact, and obviousness cannot thereby be established

Moreover, the rejection fails for lack of a suitable rationale leading an artisan to modify and combine references in the manner claimed. Instead, the Final Rejection relies on hindsight reconstruction:

It would be obvious to a person of ordinary skill in the art at the time of the invention to include in Kenney using information gathered at a brick and mortar store as is taught by Swartz, because this would give Kenney the means for easily creating a personal shopping list for items available to the shopper.

It will be recognized that this rationale is one of the inventive principles proposed by appellants in their specification (*i.e.*, facilitating on-line shopping by reference to previous bricks and mortar shopping) – about which nothing is taught in the prior art. Here the Office has adopted a teaching provided only in appellants' specification, and offered it as the motivation for a § 103 rejection. A *prima facie* case is not established by such hindsight reasoning.

Again, the § 103 rejection is multiply flawed.

### 21. Claim 15 (§ 103: Kenney + Swartz)

The rejection (Kenney + Swartz) of claim 15 stands or falls with the rejection of claim 9 (Kenney + Swartz), from which it depends.

#### 22. Claim 16 (§ 103: Kenney + Swartz)

The rejection (Kenney + Swartz) of claim 16 stands or falls with the rejection of claim 9 (Kenney + Swartz), from which it depends.

## 23. Claim 17 (§ 103: Kennev + Swartz)55

Claim 17 is an independent claim that reads as follows:

17. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical – rather than strictly textual –representations of tiems for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest by reference to the shopper's prior activity in a bricks and mortar store, wherein said items of potential interest include at least one item that the shopper has not previously purchased from said first vendor.

The Office contends that the concluding "wherein..." clause is taught by Kenney's Fig. 7. Not so.

Kenney's Fig. 7 shows a "Special Today" item. (Presumably, such featured items have not been previously purchased from that on-line vendor.) However, the "said items" required by the wherein clause can be seen to refer back earlier in the claim to one or more items that were identified as of potential interest by reference to the shopper's prior activity in a bricks and mortar store. Neither reference teaches or suggests such arrangement. Thus, even if the art were combined, the claimed combination could not result.

Moreover, the Final Rejection offered no rationale as to why an artisan would have modified Kenney's teaching to feature, as a "Special Today" item, an item that was identified by

See, e.g., December 5, 2005, Final Rejection, page 11.

reference to the shopper's prior activity in a bricks and mortar store, yet had not been previously purchased from the first vendor.

Instead of offering any rationale, the Final Rejection copied the claim into the Action, and cited different clauses to either the rejection of claim 9, or to Kenney. However, such analysis provides no rationale leading to the combination defined by claim 17.

Again, the rejection is multiply-flawed; prima facie obviousness has not been established.

# 24. Claim 19 (§ 103: Kenney + Swartz)<sup>56</sup>

Claim 19 is an independent claim that reads as follows:

19. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical – rather than strictly textual – representations of items for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest, at least in part, by sensing identification data from products while at the shopper's residence.

Again, the Office has apparently selectively pieced together elements from the art, using appellants claim as a template, and urged that same would have been obvious at the time of appellants' filing.

Again, the rejection is silent on any rationale that would have led an artisan to the proposed combination. Instead, the Final Rejection again copied the claim into the Action, and cited different clauses to either the rejection of claim 9, or to Kenney. However, such analysis provides no rationale leading to the combination defined by claim 19.

Again, the rejection is multiply-flawed; prima facie obviousness has not been established.

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See, e.g., December 5, 2005, Final Rejection, page 11.

# 25. Claim 18 (§ 103: Kenney + Swartz + St. Regis v. Bemis)<sup>57</sup>

Claim 18 is an independent claim that reads as follows:

18. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical – rather than strictly textual – representations of items for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest by reference to the shopper's prior shopping history, where said history includes transactions with vendors other than said first vendor.

None of the art teaches the concluding "where..." clause. The Final Rejection again resorts to the 7<sup>th</sup> Circuit's St. Regis decision for a supposed rule of per se obviousness.

Again, however, St. Regis did not establish such a per se test.

And again, St. Regis is inapposite; claim 18 does not involve mere duplication of an element known from the prior art. Rather, claim 18 requires that in connection with on-line shopping with a first vendor, use be made of a prior shopping history that includes transactions with vendors other than the first vendor. The art is silent as to such limitation.

Again, prima facie obviousness has not been established.

#### VIII. CONCLUSION

Swartz anticipates none of the claims. Nor has the Office met the *prima facie* burden required in connection with the rejections under § 103. The rejections should be reversed, and the case passed to issuance.

Date: May 15, 2006

CUSTOMER NUMBER 23735

Phone: 503-885-9699 FAX 503-885-9880 Respectfully submitted,

DIGIMARC CORPORA

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See, e.g., December 5, 2005, Final Rejection, page 12.

#### IX. PENDING CLAIMS APPENDIX

#### 1. A method comprising:

presenting a collection of retail items, each having an indicia associated therewith, in a bricks and mortar store offering items for sale;

sensing the indicia associated with selected ones of said items;

compiling a list identifying the items whose indicia were sensed:

storing said list in a data structure associated with a user; and

later recalling said list;

using said recalled list to present a customized selection of items in an on-line shopping environment: and

receiving input from a user identifying a subset of items from said customized selection of items.

#### 2. (Canceled)

3. A method of conducting an online shopping session comprising:

identifying a user by reference to a login identifier;

recalling a list of products associated with the user;

presenting products from said list to the user for selection;

receiving user selections of products to be purchased;

receiving an indication that the user is finished selecting products; and

thereafter querying the user regarding possible purchase of an item not selected by the user but on said recalled list, before completing the online shopping session.

A computer storage medium having instructions thereon causing a computer to perform the process of claim 3.

5. The method of claim 3 which includes selecting said item in accordance with a procedure that depends, in part, on the passage of a predetermined interval of time without the user selecting said item for purchase.

The method of claim 3 that includes selecting said item only if the total price of items selected by the user meets a pre-determined criterion.

### 7. A method comprising:

logging a shopper's habits or preferences exhibited in an on-line shopping environment in one or more database records associated with that shopper; and

recalling said logged database record in a bricks and mortar store and using the logged information in connection with bricks and mortar shopping by said user.

#### 8. (Canceled)

- 9. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical rather than strictly textual –representations of items for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest by reference to the shopper's prior activity in a bricks and mortar store.
- 10. The method of claim 1 in which the sensing comprises sensing said selected items along aisles at which said items are displayed, away from a checkout stand.
  - 11. The method of claim 1 in which the sensing comprises sensing an RFID identifier.
- 12. The method of claim 3 in which the item not selected by the user, but on said recalled list associated with the user, is a dessert or cookie item.

13. The method of claim 3 in which the item is the subject of said query only if said item has not been purchased by the user for a predetermined period.

- 14. The method of claim 3 in which the item is the subject of said query only if the user has demonstrated a prior purchasing habit related to said item, and the omission of said item is not in accordance with said demonstrated habit.
- 15. The method of claim 9 wherein said activity is activity in a bricks and mortar store associated with the first vendor.
  - 16. The method of claim 9 wherein said activity is a shopping activity.
- 17. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical rather than strictly textual –representations of items for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest by reference to the shopper's prior activity in a bricks and mortar store, wherein said items of potential interest include at least one item that the shopper has not previously purchased from said first vendor.
- 18. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical rather than strictly textual –representations of items for sale, wherein items of potential interest to a shopper are presented more prominently than other items, and that includes identifying items of potential interest by reference to the shopper's prior shopping history, where said history includes transactions with vendors other than said first vendor
- 19. In a method of on-line shopping from a first vendor, an improvement comprising displaying a virtual shopping aisle with graphical – rather than strictly textual –representations of items for sale, wherein items of potential interest to a shopper are presented more prominently

than other items, and that includes identifying items of potential interest, at least in part, by sensing identification data from products while at the shopper's residence.

20. A method of facilitating on-line shopping comprising:

collecting data about products of interest during a shopper's visit to a bricks and mortar store, said data being collected prior to check-out; and

using the data thereby acquired in a later on-line shopping session with said shopper.

- 21. The method of claim 20 wherein at least certain of the products of potential interest are not purchased by said shopper during said visit to said store.
- 22. The method of claim 20 wherein the data collection includes shopper activation of a shelf-based sensor associated with a product of interest.
- 23. The method of claim 20 wherein the data collection includes shopper use of a sensor device in the aisle of the store to collect data relating to a product of interest.
- 24. The method of claim 1 wherein at least one of said items is sensed while located in an aisle of the store, rather than at checkout.
- 25. The method of claim 1 wherein the sensing of at least one item occurs without an associated purchase transaction.
- 26. The method of claim 1 in which the bricks and mortar store is associated with a first vendor, and the recalled list is used by a second vendor distinct from the first, to present a customized selection of items in an on-line shopping environment.
- 27. The method of claim 3 in which the on-line shopping session is with a first vendor, yet products included on the recalled list include products that the user has not purchased from the first vendor.

# X. EVIDENCE APPENDIX

None.

# XI. RELATED PROCEEDINGS APPENDIX

None.